National Science Foundation

National Science Foundation
Inorganic, Bioinorganic and Organometallic Chemistry Modification 3

Document Type:	Modification to Previous Grants Notice
Funding Opportunity Number:	PD-07-3905
Opportunity Category:	Discretionary
Current Closing Date for Applications:	Jul 31, 2007 Full Proposal Windows: July 1 to July 31 and November 1 to November 30 annually.
CFDA Number:	47.049 -- Mathematical and Physical Sciences
Cost Sharing or Matching Requirement:	No

Eligible Applicants

Unrestricted

Description

Supports research on the synthesis, properties, and reaction mechanisms of molecules composed of metals, metalloids, and nonmetals with elements covering the entire periodic table. Included are fundamental studies that underscore (1) bioinorganic reactions, (2) homogeneous catalysis and organometallic reactions, (3) photochemical and charge transfer processes, and (4) studies aimed at the rational synthesis of new inorganic molecular substances, self-assemblies, and nano-size materials with predictable chemical, physical, and biological properties. Objectives are to provide the basis for understanding (1) the function of metal ions in biological systems, (2) the behavior of new inorganic materials and new industrial catalysts, and (3) the systematic chemistry and behavior of most of the elements and compounds in the environment. The program has links to other programs within NSF that support chemistry research, including Solid State Chemistry and Polymers (Materials Research Division, MPS Directorate); Chemical Reaction Processes (Chemical and Transport Systems Division, ENG Directorate); Biochemistry and Biophysics (Molecular and Cellular Biosciences Division, BIO Directorate); and Geochemistry (Earth Sciences Division, GEO Directorate).

NSF Program Description 07-3905 - http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5373

http://www.grants.gov/search/search.do?mode=VIEW&oppId=7626

National Science Foundation
NanoManufacturing
Modification 4

Document Type:	Modification to Previous Grants Notice
Funding Opportunity Number:	PD-05-1788

Opportunity Category:	Discretionary
Current Closing Date for Applications:	Proposals accepted anytime
CFDA Number:	47.041 -- Engineering Grants
Cost Sharing or Matching Requirement:	No

Eligible Applicants

Unrestricted

Description

The NanoManufacturing Program was established in 2001 to promote fundamental research and education at the nanoscale, and to transfer developments in nanoscience and nanotechnology discoveries from the laboratory to industrial application with prominent societal impacts. The program emphasizes scaleup of nanotechnology for high rate production, reliability, robustness, yield, efficiency and cost issues for manufacturing products and services. NanoManufacturing capitalizes on the special material properties and processing capabilities at the nanoscale, and promotes integration of nanostructures to functional micro devices and meso/macroscale architectures and systems, as well as the interfacing issues across dimensional scales. The program covers interdisciplinary research and promotes multi-functionality across all energetic domains, including mechanical, thermal, fluidic, chemical, biochemical, electromagnetic, optical etc. The focus of NanoManufacturing is in a systems approach, encompassing nanoscale materials and structures, fabrication and integration processes, production equipment and characterization instrumentation, theory/modeling/simulation and control tools, biomimetic design and integration of multiscale functional systems, and industrial application. The program places special emphasis in NanoManufacturing education and training of the workforce, involvement of socio-economic sciences, addressing the health, safety and environmental implications, development of manufacturing infrastructure, as well as outreach and synergy of the academic, industrial, federal and international community.

NSF Program Description 05-1788 -
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13347

http://www.grants.gov/search/search.do?mode=VIEW&oppId=7641

National Science Foundation
Undergraduate Research and Mentoring in the Biological Sciences Modification 3

Document Type:	Modification to Previous Grants Notice
Funding Opportunity Number:	06-591
Opportunity Category:	Discretionary
Current Closing Date for Applications:	Mar 04, 2008 Preliminary Proposal Due Date(s) (required): October 30, 2006 Third Tuesday in September, Annually Thereafter

	2007-09-18 2008-09-16 2009-09-15 2010-09-21 Full Proposal Deadline(s) (due by 5 p.m. proposer's local time): March 06, 2007 First Tuesday in March, Annually Thereafter 2007-03-06 2008-03-04 2009-03-03 2010-03-02 2011-03-01
Expected Number of Awards:	8
Estimated Total Program Funding:	$4,000,000
Award Ceiling:	
Award Floor:	
CFDA Number:	47.074 -- Biological Sciences
Cost Sharing or Matching Requirement:	No

Eligible Applicants

Proposals may only be submitted by the following: * Academic Institutions located in the US * Collaborative Proposals from two or more institutions are allowed Undergraduate student participants supported with NSF funds must be citizens or permanent residents of the United States or its possessions. An undergraduate student is one who is enrolled in a degree program (part-time or full-time) leading to a baccalaureate or associates degree. High school graduates who have not yet enrolled, and students who have received their bachelor's degrees and are no longer enrolled as undergraduates, are not eligible.

Description

The goal of the Undergraduate Research and Mentoring in the Biological Sciences (URM) program is to increase the number and diversity of individuals pursuing graduate studies in all areas of biological research supported by the NSF Directorate for Biological Sciences. Support will be provided to academic institutions to establish innovative programs to engage undergraduates in a year-round research and mentoring activity. Particular emphasis will be placed on broadening participation of members of groups historically underrepresented in science and engineering: African Americans, Alaska Natives, American Indians, Hispanic Americans, Native Pacific Islanders, and persons with disabilities.

NSF Publication 06-591 - http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06591

http://www.grants.gov/search/search.do?mode=VIEW&oppId=10450

National Science Foundation
Organic and Macromolecular Chemistry
Modification 3

Document Type:	Modification to Previous Grants Notice
Funding Opportunity Number:	PD-07-3903
Opportunity Category:	Discretionary
Current Closing Date for	Jul 31, 2007 Full Proposal Windows: July 1 to

Applications:	July 31 and November 1 to November 30, annually
CFDA Number:	47.049 -- Mathematical and Physical Sciences
Cost Sharing or Matching Requirement:	No

Eligible Applicants

Unrestricted (i.e., open to any type of entity above), subject to any clarification in text field entitled "Additional Information on Eligibility"

Description

Supports research that will advance the knowledge of carbon-based molecules, metallo-organic systems, and organized molecular assemblies. Experimental, computational, and theoretical projects that illuminate chemical structures, reactivity, and properties and that provide organic mechanistic, structural, and kinetic foundations for the understanding of biological processes are all considered. The program has links to other programs within NSF that support chemistry research, including Solid State Chemistry and Polymers (Materials Research Division, MPS Directorate); Chemical Reaction Processes (Chemical and Transport Systems Division, ENG Directorate); Biochemistry and Biophysics (Molecular and Cellular Biosciences Division, BIO Directorate); and Atmospheric Chemistry (Atmospheric Sciences Division, GEO Directorate).Organic Synthesis Supports research on the synthesis of carbon-based molecules, organometallic systems, and organized molecular assemblies. Research includes the development of new reagents and methods for organic synthesis and characterization, and the investigation of natural products and new organic materials. Such research provides the basis for designed syntheses of new materials and natural products important to the chemical and pharmaceutical industries. The research has links to other programs within NSF that support chemistry research, including Biochemistry (Molecular and Cellular Biosciences Division, BIO Directorate) and Polymers (Materials Research Division, MPS Directorate).

NSF Program Description - http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5640

http://www.grants.gov/search/search.do?mode=VIEW&oppId=10654

National Science Foundation
Grant Opportunities for Academic Liaison with Industry (GOALI) Modification 2

Document Type:	Modification to Previous Grants Notice
Funding Opportunity Number:	07-522
Opportunity Category:	Discretionary
Current Closing Date for Applications:	Supplement Due Date(s): Proposals Accepted Anytime Investigators should discuss supplemental funding with their NSF program officer prior to submission. Full Proposal Deadline(s): Proposals Accepted Anytime Full

	proposals are only accepted within specific periods established by the directorates and their participating programs for unsolicited proposals. Check the NSF website or with the program office for acceptable submission periods.
Expected Number of Awards:	80
Estimated Total Program Funding:	$5,000,000
Award Ceiling:	
Award Floor:	
CFDA Number:	47.041 -- Engineering Grants
CFDA Number:	47.049 -- Mathematical and Physical Sciences
CFDA Number:	47.050 -- Geosciences
CFDA Number:	47.070 -- Computer and Information Science and Engineering
CFDA Number:	47.074 -- Biological Sciences
CFDA Number:	47.075 -- Social, Behavioral, and Economic Sciences
CFDA Number:	47.076 -- Education and Human Resources
CFDA Number:	47.078 -- Polar Programs
CFDA Number:	47.079 -- International Science and Engineering (OISE)
CFDA Number:	47.080 -- Office of Cyberinfrastructure
Cost Sharing or Matching Requirement:	No

Eligible Applicants:

Proposals may only be submitted by the following: * U.S. institutions of higher education that confer degrees in research areas normally supported by NSF. Proposals may only be submitted on behalf of faculty members with full-time appointments. Federal laboratories and agencies, national labs, and non-profit organizations are encouraged to participate in three-way collaborations that also include the university and industry. PI Limit: For fellowships/traineeships, only U.S. citizens, nationals, or permanent residents are eligible to apply for support under this program.

Description

Grant Opportunities for Academic Liaison with Industry (GOALI) aims to synergize university-industry partnerships by making project funds or fellowships/traineeships available to support an eclectic mix of industry-university linkages. Special interest is focused on affording the opportunity for: * Faculty, postdoctoral fellows, and students to conduct research and gain experience in an industrial setting; * Industrial scientists and engineers to bring industry's perspective and integrative skills to academe; and * Interdisciplinary university-industry teams to conduct research projects. This solicitation targets high-risk/high-gain research with a focus on fundamental topics, new approaches to solving generic problems, development of innovative collaborative industry-university educational programs, and direct transfer of new knowledge between academe and

industry. GOALI seeks to fund research that lies beyond that which industry would normally fund by themselves.

NSF Publication 07-522 - http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07522

http://www.grants.gov/search/search.do?mode=VIEW&oppId=11487

National Science Foundation
Research Experiences for Undergraduates Grant

Current Closing Date for Applications:	Aug 18, 2008 09/13/2007 REU Site proposals, except to Antarctic Program 06/06/2008 REU Site proposals to the Antarctic Program 08/18/2008 REU Site proposals, except to Antarctic Program 06/05/2009 REU Site proposals
Funding Instrument Type:	Cooperative Agreement
Category of Funding Activity:	Science and Technology and other Research and Development
Category Explanation:	
Expected Number of Awards:	1800
Estimated Total Program Funding:	$57,000,000
Award Ceiling:	$400,000
Award Floor:	$5,000
CFDA Number:	47.041 -- Engineering Grants
CFDA Number:	47.049 -- Mathematical and Physical Sciences
CFDA Number:	47.050 -- Geosciences
CFDA Number:	47.070 -- Computer and Information Science and Engineering
CFDA Number:	47.074 -- Biological Sciences
CFDA Number:	47.075 -- Social, Behavioral, and Economic Sciences
CFDA Number:	47.076 -- Education and Human Resources
CFDA Number:	47.078 -- Polar Programs
CFDA Number:	47.079 -- International Science and Engineering (OISE)
CFDA Number:	47.080 -- Office of Cyberinfrastructure
Cost Sharing or Matching Requirement:	No

Description

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. This solicitation features two mechanisms for support of student research: (1)

REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Sites may be based in a single discipline or academic department, or on interdisciplinary or multi-department research opportunities with a coherent intellectual theme. Proposals with an international dimension are welcome. A partnership with the Department of Defense supports REU Sites in DoD-relevant research areas. (2) REU Supplements may be requested for ongoing NSF-funded research projects or may be included as a component of proposals for new or renewal NSF grants or cooperative agreements. Undergraduate student participants in either Sites or Supplements must be citizens or permanent residents of the United States or its possessions. Students may not apply to NSF to participate in REU activities. Students apply directly to REU Sites and should consult the directory of active REU Sites on the Web at http://www.nsf.gov/crssprgm/reu/reu_search.cfm.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07569

http://www.grants.gov/search/search.do?mode=VIEW&oppId=14439

National Science Foundation
Advanced Learning Technologies (ALT)
Modification 3

Current Closing Date for Applications:	Apr 25, 2008
Expected Number of Awards:	10
Estimated Total Program Funding:	$2,800,000
Award Ceiling:	$200,000
Award Floor:	$100,000
CFDA Number:	47.070 -- Computer and Information Science and Engineering
CFDA Number:	47.076 -- Education and Human Resources

Description

Through the Advanced Learning Technologies (ALT) program, the CISE and EHR Directorates of NSF support research that (1) enables radical improvements in learning through innovative computer and information technologies, and (2) advances research in computer science, information technology, learning, and cognitive science through the unique challenges posed by learning environments and learning technology platforms. Integrative research approaches that build across disciplines and establish tight linkages among theory, experiment, and design are strongly encouraged. Technology goals may include systems for tutoring or assessment, modeling and sensing of cognitive or emotional states, context awareness, natural language interfaces, collaboration, knowledge management, and non-traditional goals that redefine the roles of technology in learning. Educational foci for ALT projects must include an area of science, technology, engineering, or mathematics (STEM), or general cross-cutting skills directly relevant to STEM.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06535

http://www.grants.gov/search/search.do?mode=VIEW&oppId=7927

National Science Foundation
Petrology and Geochemistry
Modification 3

Current Closing Date for Applications:	Dec 01, 2007 subsequent due dates: June 1 and December 1 annually
Expected Number of Awards:	60
Estimated Total Program Funding:	$13,900,000
CFDA Number:	47.050 -- Geosciences

Description

The Petrology and Geochemistry Program supports basic research on the formation and chemical composition of Earth materials in the crust, mantle, and core. Proposals in this program generally address the petrology and high-temperature geochemistry of igneous and metamorphic rocks (including mantle samples), mineral physics, and volcanology. Proposals that bridge disciplinary boundaries or that include development of analytical tools for potential use by the broad community are also encouraged.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06543 - NSF Publication 06-543

http://www.grants.gov/search/search.do?mode=VIEW&oppId=8172

National Science Foundation
Tectonics
Modification 3

Current Closing Date for Applications:	Dec 01, 2007 subsequent due dates: June 1 and December 1, annually
Expected Number of Awards:	40
Estimated Total Program Funding:	$9,200,000
CFDA Number:	47.050 -- Geosciences

Description

The Tectonics Program supports a broad range of field, laboratory, computational, and theoretical investigations aimed at understanding the evolution and deformation of continental lithosphere through time. Proposals to elucidate the processes that act on the lithosphere at various time-scales and length-scales, either at depth or the surface, are encouraged. Because understanding such large-scale phenomena commonly requires a variety of expertise and methods, the Tectonics Program supports integrated research involving the disciplines of structural geology, petrology, geochronology, sedimentology, stratigraphy, geomorphology, rock mechanics, paleomagnetics, geodesy, and other geophysical techniques.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06544 - NSF Publication 06-544

http://www.grants.gov/search/search.do?mode=VIEW&oppId=8173

National Science Foundation
Hydrologic Sciences
Modification 3

Current Closing Date for Applications:	Dec 01, 2007 subsequent due dates: June 1 and December 1 annually
Expected Number of Awards:	30
Estimated Total Program Funding:	$7,400,000
CFDA Number:	47.050 -- Geosciences

Description

Hydrologic Sciences focuses on the flow of water and transport processes within streams, soils, and aquifers. Particular attention is given to spatial and temporal heterogeneity of fluxes and storages of water and chemicals over a wide range of scales, to geolimnology and to interfaces with the landscape, microbial communities, and coastal areas. Studies may also deal with processes in aqueous geochemistry and with the physical, chemical, and biological processes within water bodies. Study of these processes requires expertise from many basic sciences and mathematics, and proposals often require joint review with related programs.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06545 - NSF Publication 06-545

http://www.grants.gov/search/search.do?mode=VIEW&oppId=8174

National Science Foundation

Geophysics
Modification 3

Current Closing Date for Applications:	Dec 01, 2007 subsequent due dates: June 1 and December 1, annually
Expected Number of Awards:	70
Estimated Total Program Funding:	$14,600,000
CFDA Number:	47.050 -- Geosciences

Description

The Geophysics Program supports basic research in the physics of the solid earth to explore its composition, structure, and processes. Laboratory, field, theoretical, and computational studies are supported. Topics include seismicity, seismic wave propagation, and the nature and occurrence of earthquakes; the earth's magnetic, gravity, and electrical fields; the earth's thermal structure; and geodynamics. Supported research also includes geophysical studies of active deformation, including geodesy, and studies of the properties and behavior of earth materials in support of geophysical observation and theory.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06546 - NSF Publication 06-546

http://www.grants.gov/search/search.do?mode=VIEW&oppId=8223

National Science Foundation
Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) Modification 2

Current Closing Date for Applications:	May 10, 2008 Subsequent Due Dates: May 10, 2007 and May 10, annually thereafter
Expected Number of Awards:	10
Estimated Total Program Funding:	$1,000,000
Award Ceiling:	$150,000
CFDA Number:	47.050 -- Geosciences

Description

CEDAR is a broad-based, community-initiated, upper atmospheric research program. The goal is to understand the behavior of atmospheric regions from the middle atmosphere upward through the thermosphere and ionosphere into the exosphere in terms of coupling, energetics, chemistry, and dynamics on regional and global scales. These processes are related to the sources of perturbations that propagate upward from the lower atmosphere as well as to solar radiation and particle inputs from above. The activities within this program combine observations, theory and modeling.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06561 - NSF Publication 06-561

http://www.grants.gov/search/search.do?mode=VIEW&oppId=8859

National Science Foundation
Information and Intelligent Systems: Advancing Human-Centered Computing, Information Integration and Informatics, and Robust Intelligence Modification 3

Expected Number of Awards:	150
Estimated Total Program Funding:	$50,000,000
CFDA Number:	47.070 -- Computer and Information Science and Engineering

Description

NSF's Division of Information and Intelligent Systems intends to fund science and engineering research and education projects that develop new knowledge in the following three core technical areas: Human-Centered Computing (HCC);Information Integration and Informatics (III); and Robust Intelligence (RI).In addition to the three core technical areas, IIS will support research in two cross-cutting technical areas: Human-Robot (and/or Agents) Interaction (HRI); and Information Privacy and Security (IPS).IIS also intends to fund curriculum development (IISCD) activities that have the potential to greatly improve higher education in IIS core and cross-cutting areas. Projects should result in new knowledge and prepare future generations of professionals in IIS areas of research and education. To ensure that proposals with roughly comparable scope and objectives are reviewed together, IIS proposals are divided into three classes by budget size: Small Projects (up to $450,000 total budget);Medium Projects ($450,001 to $900,000 total budget); and Large Projects ($900,001 to $1,800,000 total budget).Proposals with budgets that exceed $1,800,000 will be returned without review.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06572 - NSF publication 06-572

http://www.grants.gov/search/search.do?mode=VIEW&oppId=9737

National Science Foundation
CEDAR, GEM, and SHINE Postdoctoral Research Modification 1

Current Closing Date for Applications:	Feb 04, 2008 February 05, 2007 First Monday in February, Annually Thereafter
Expected Number of Awards:	3
Estimated Total Program	$320,000

Funding:
CFDA Number: 47.050 -- Geosciences

Description

The Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) program, the Geospace Environment Modeling (GEM) program, and the Solar, Heliosphere and Interplanetary Environment (SHINE) program are special programs within the Aeronomy, Magnetospheric Physics and Solar-Terrestrial Research programs in the Atmospheric Sciences Division of the Geosciences Directorate. These three programs each involve specific regions of the space environment and the way these regions interact. Each of the programs has its own Program Solicitation, but they also have a common commitment to support researchers who have recently received their Ph.D. degree, allowing them to request limited support for CEDAR/GEM/SHINE research activities of their own devising.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06584 - NSF Publication 06-584

http://www.grants.gov/search/search.do?mode=VIEW&oppId=10284

National Science Foundation
Information Technology Experiences for Students and Teachers (ITEST) Modification 2

Current Closing Date for Applications:	May 08, 2008 Preliminary Proposal Due Date(s) (required): January 05, 2007 January 04, 2008 and the first Friday in January thereafter Full Proposal Deadline(s) (due by 5 p.m. proposer's local time): May 10, 2007 May 08, 2008 and the second Thursday in May thereafter
Expected Number of Awards:	17
Estimated Total Program Funding:	$20,000,000
CFDA Number:	47.076 -- Education and Human Resources

Description

Information technologies are integral to both the workplace and everyday activities of most Americans. They are part of how people learn, how they interact with each other and information, and how they represent and understand their world. Attaining a basic understanding of these technologies and mastery of essential technical skills is a requirement for anyone to benefit from innovation in the modern world. The technological growth of the nation depends on a technologically literate citizenry. ITEST is designed to increase the opportunities for students and teachers to learn about, experience, and use information technologies within the context of science, technology, engineering, and mathematics (STEM), including Information Technology (IT) courses. It is in direct response to the concern about shortages of information technology workers in the United States. Supported projects are intended to provide opportunities for middle and high school children and teachers to build the skills and knowledge needed to

advance their study, and to function and to contribute in a technologically rich society. Additionally, exposure to engaging applications of IT is a means to stimulate student interest in the field and an important precursor to the academic preparation needed to pursue IT careers. The ITEST program seeks projects that demonstrate innovative and creative applications of IT in school and non-school contexts and is committed to preparing learners to benefit from and contribute to the growing national cyberinfrastructure.ITEST has four components: (a) youth-based projects with strong emphases on career and educational pathways (b) comprehensive projects for students and teachers (c) renewals of existing projects (d) and an ITEST Resource Center. This solicitation complements and is not intended to overlap with the Advanced Technological Education (ATE) program (http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5464&org=ESIE&from=home). Information Technology (IT) is within the scope of the ATE program, so proposals for the development of IT classroom materials for students or teachers, or for professional development of IT teachers in support of technical careers, should be submitted to the ATE program.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07514 - NSF Publication 07-514

http://www.grants.gov/search/search.do?mode=VIEW&oppId=11346

National Science Foundation
Industry/University Cooperative Research Centers Program Modification 1

Current Closing Date for Applications:	Sep 28, 2007 Letter of Intent (required): Jan 19, 2007, June 29, 2007, First Friday in Jan and Fourth Friday in June, Annually Thereafter Full Proposal: March 30, 2007, Sept 28, 2007 Fourth Friday in March and Fourth Friday in Sept, Annually Thereafter
Expected Number of Awards:	8
Estimated Total Program Funding:	$9,000,000
Award Ceiling:	$150,000
Award Floor:	$10,000
CFDA Number:	47.041 -- Engineering Grants
CFDA Number:	47.070 -- Computer and Information Science and Engineering

Description

The Industry/University Cooperative Research Centers (I/UCRCs) program develops long-term partnerships among industry, academe, and government. The centers are catalyzed by a small investment from the National Science Foundation (NSF) and are primarily supported by industry center members, with NSF taking a supporting role in their development and evolution. Each center is established to conduct research that is of interest to both the industry and the center. An I/UCRC contributes to the Nation's

research infrastructure base and enhances the intellectual capacity of the engineering and science workforce through the integration of research and education.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07537 - NSF Publication 07-537

http://www.grants.gov/search/search.do?mode=VIEW&oppId=12062

National Science Foundation
Course, Curriculum, and Laboratory Improvement Modification 2

Current Closing Date for Applications:	Jan 10, 2008 May 08 2007 - Phase 1 proposals from organizations in states or territories beginning with A through M May 09 2007 - Phase 1 proposals from organizations in states or territories beginning with N through W Jan 10 2008 - Phase 2 and 3 proposals
CFDA Number:	47.076 -- Education and Human Resources

Description

The Course, Curriculum, and Laboratory Improvement (CCLI) program seeks to improve the quality of science, technology, engineering, and mathematics (STEM) education for all undergraduate students. The program supports efforts to create new learning materials and teaching strategies, develop faculty expertise, implement educational innovations, assess learning and evaluate innovations, and conduct research on STEM teaching and learning. The program supports three types of projects representing three different phases of development, ranging from small, exploratory investigations to large, comprehensive projects.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07543 - NSF Publication 07-543

http://www.grants.gov/search/search.do?mode=VIEW&oppId=12313

National Science Foundation
Joint Domestic Nuclear Detection Office/National Science Foundation: Academic Research Initiative Modification 1

Current Closing Date for Applications:	Apr 02, 2008 Letter of Intent Due Date(s) (required): March 28, 2007 (for all size ARI proposals) Full Proposal Deadline(s): May 02, 2007 (for all size ARI proposals) First Wednesday in April, Annually Thereafter
Expected Number of Awards:	34

Estimated Total Program Funding:	$58,000,000
Award Ceiling:	
Award Floor:	
CFDA Number:	47.041 -- Engineering Grants
CFDA Number:	47.049 -- Mathematical and Physical Sciences
CFDA Number:	47.070 -- Computer and Information Science and Engineering
CFDA Number:	47.075 -- Social, Behavioral, and Economic Sciences
CFDA Number:	47.076 -- Education and Human Resources
CFDA Number:	47.079 -- International Science and Engineering (OISE)
CFDA Number:	47.080 -- Office of Cyberinfrastructure

Additional Information on Eligibility:

*Organization Limit: Proposals may only be submitted by the following: -Universities and colleges: U.S. universities and two- and four-year colleges (including community colleges) *PI Limit: An individual researcher may not be named as a participant on more than one proposal submitted to this solicitation. This limitation includes participation as a PI, co-PI, senior researcher, consultant, or any other role for which financial remuneration is requested. ARI award funds may not provide salary support to industry, government laboratories or international organizations but may be used, in limited cases, to support travel in support of collaborative work.

Agency Name

National Science Foundation

Description

In FY 2007, the Domestic Nuclear Detection Office (DNDO) within the Department of Homeland Security (DHS) will invest, in partnership with the National Science Foundation (NSF), in leading edge, frontier research at academic institutions. This transformational research effort will be focused on detection systems, individual sensors or other research that is potentially relevant to the detection of nuclear weapons, special nuclear material, radiation dispersal devices and related threats. Research that would benefit from incorporation of social and behavioral science components is appropriate for consideration. The joint DNDO/NSF effort, in coordination with the efforts of other agencies, seeks to advance fundamental knowledge in new technologies for the detection of nuclear threats and to develop intellectual capacity in fields relevant to long-term advances in nuclear detection capability. This research, and the research community that will be built under the ARI, is seen as critical to our nation's ability to deploy effective nuclear detection measures to counter the serious threat of a nuclear terrorist attack .Proposals outside of the scope described in this solicitation will be returned without review. Research proposals on detection of biological, chemical, and conventional weapons are specifically excluded from the scope of this solicitation.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07545 - NSF Publication 07-545

http://www.grants.gov/search/search.do?mode=VIEW&oppId=12404

National Science Foundation
Broadening Participation in Computing
Modification 1

Description

The Broadening Participation in Computing (BPC) program aims to significantly increase the number of U.S. citizens and permanent residents receiving post secondary degrees in the computing disciplines, with an emphasis on students from communities with longstanding under representation in computing: women, persons with disabilities, and minorities. Included minorities are African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders. The BPC program seeks to engage the computing community in developing and implementing innovative methods to improve recruitment and retention of these students at the undergraduate and graduate levels. Because the lack of role models in the professoriate can be a barrier to participation, the BPC program also aims to develop effective strategies for encouraging individuals to pursue academic careers in computing and become these role models. There are three components to the BPC program: Alliances. Broad Alliances of institutions and organizations will design and carry out comprehensive programs that address under representation in the computing disciplines. Alliances will join academic institutions of higher learning with secondary (and possibly middle) schools, government, industry, professional societies, and other not-for-profit organizations. In most cases, Alliances will involve multiple academic institutions of higher learning. Together, the participants will (1) develop and implement interventions that support students, (2) create sustainable changes in culture and practices at the institutional, departmental, and organizational levels, and (3) serve as models and repositories for effective practices to broaden participation. The emphasis will be on activities that have significant impact both in the quality of opportunities afforded to students and in the number of students potentially served. While the focus is on implementations, an Alliance may include complementary research that informs the design of its activities. The leveraging of existing efforts both across and within the under represented communities is strongly encouraged. Alliance Extensions. Successful BPC Alliances can propose additional funding to significantly expand the impact of their work. The new funding can overlap with the final year of the Alliance project and can extend it for up to two years. Extensions must increase not just the duration of the Alliance award but also its scope, introducing additional targeted student groups, partners, and/or projects. Demonstration Projects. Demonstration Projects (DPs) are smaller in scope and narrower in focus than Alliance projects. Typically DPs will be pilots of innovative programs that, once fully developed, could be incorporated into the activities of an Alliance. Projects might, for example, be proposed by a single institution or might focus on a specific underrepresented community, a specific point in the academic pipeline, or on a specific impediment to full participation in computing. As in the case of Alliances, complementary, well-defined research aimed at informing the development of the project can be included.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07548 - NSF Publication 07-548

http://www.grants.gov/search/search.do?mode=VIEW&oppId=12876

National Science Foundation
Science, Technology, Engineering, and Mathematics Talent Expansion Program Grant

Current Closing Date for Applications:	Sep 18, 2007 Letter of Intent Due Date(s) (optional): August 07, 2007 Full Proposal Deadline(s): September 18, 2007
Expected Number of Awards:	20
Estimated Total Program Funding:	$26,000,000
CFDA Number:	47.076 -- Education and Human Resources

Description

The Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) seeks to increase the number of students (U.S. citizens or permanent residents) receiving associate or baccalaureate degrees in established or emerging fields within science, technology, engineering, and mathematics (STEM). Type 1 proposals are solicited that provide for full implementation efforts at academic institutions. Type 2 proposals are solicited that support educational research projects on associate or baccalaureate degree attainment in STEM.

Link to Full Announcement

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07570 - NSF Publication 07-570

http://www.grants.gov/search/search.do?mode=VIEW&oppId=14447